Generational shifts in managerial values and the coming of a global business culture

van Hoorn, A.A.J.

university of groningen

faculty of economics and business

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André van Hoorn

university of groningen / faculty of economics and business

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Research Institute SOM
Faculty of Economics & Business
University of Groningen

Visiting address:
Nettelbosje 2
9747 AE Groningen
The Netherlands

Postal address:
P.O. Box 800
9700 AV Groningen
The Netherlands

T +31 50 363 7068/3815

www.rug.nl/feb/research

university of groningen

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André van Hoorn
University of Groningen
A.A.J.van.Hoorn@rug.nl

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André van Hoorn

University of Groningen, PO Box 800, 9700 AV, Groningen, the Netherlands.

Tel: +31 503 633 929, Fax: +31 503 632 341, E-mail: A.A.J.van.Hoorn@rug.nl.

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Abstract

In a globalizing world, cross-national differences in values and business culture and understanding these differences become increasingly central to a range of managerial issues. Studies of cultural (dis)similarities in the values of managers (so-called managerial values) and the development of a unified, global business culture, however, have hardly developed beyond static, bi-country comparisons of managerial values. This paper addresses three recent critiques of the literature on cultural convergence. It develops a theory-driven empirical approach to the study of change in countries' business cultures that revolves around generational differences in managerial values and brings important advancement in our understanding of cross-national differences in managerial values and the dynamics therein. We use longitudinal data that cover 37,254 managers and are able, for the first time, to consider a sample of countries that is large and diverse enough to allow for credible international generalizations. Results show systematic generational shifts in managerial values towards a steady waning of cultural dissimilarities between managers. Interestingly, cultural convergence is not universal across values domains. Nevertheless, nationality is increasingly becoming a less relevant factor in managerial values. We now have strong empirical reason to move beyond thinking in simple country dichotomies when considering managerial values and business culture.

INTRODUCTION

In a globalizing world, understanding of cross-national values differences and host countries' business culture becomes increasingly crucial, critically determining the success both of firms' global endeavors and of managers working across the cultural boundaries present within the multinational firm. Starting with Harbison and Myers (1959) and Inkeles (1960), among others, much effort has gone into investigating cultural differences in the values of managers (so-called managerial values) and determining whether countries' business cultures are converging to become more similar or not (Dunphy, 1987; Ralston, 2008; Ricks, Toyne, & Martinez, 1990). Some advances have been made, notably the introduction of the crossvergence perspective by David Ralston and collaborators (e.g., Ralston, Holt, Terpstra, & Kai-Cheng, 2008), which has helped management move away from viewing convergence of countries' business culture as a yes-no phenomenon. Overall, however, scholarly analysis of the dynamics of cultural (dis)similarities in managerial values and globally converging business cultures has not kept up with the extent to which globalization has permeated business life. Particularly, there is a growing concern with the limitations of existing studies of cultural convergence, raising the question how much we truly know about the dynamics of cross-national values differences and changing business cultures. There are three main problem areas.

The first is the inappropriate use of static country comparisons. A global, unified business culture may evolve as result of changing managerial values in countries around the globe. Studying cultural convergence therefore means studying the longitudinal evolution of values. Only by employing time-series data can researchers distinguish between genuine cultural convergence or divergence and confounding factors (e.g., Hofstede, 2001; Twenge, Campbell, Hoffman, & Lance, 2010). Notwithstanding, cross-sectional comparisons of country mean values scores are the norm in this literature and longitudinal research is nearly non-existent (Ralston, 2008), leaving few empirical studies that are not methodologically shaky.

The second is that the convergence literature lacks a theoretical foundation, neglecting birth cohorts and generational shifts in managerial values as key factors in changing business cultures (Inglehart & Welzel, 2005; Mannheim, 1928/1929; Ryder, 1965). Generations and generational values differences have, in fact, been shown to be important (e.g., Joshi, Dencker, & Franz, 2011; Joshi, Dencker, Franz, & Martocchio, 2010; Twenge et al., 2010). Almost no studies actually understand the need to consider birth cohorts or generations when studying converging business cultures, however.[1]

Finally, the third problem area is the limited international generalizability of the existing evidence on cultural convergence. The convergence literature has considered only a handful of countries (Ralston, 2008) and we need a much larger number if we want to make credible international generalizations (Franke & Richey, 2010; cf. Sivakumar & Nakata, 2001). Typically, studies consider only the U.S. and China or Japan, leaving a large gap in our knowledge concerning, among others, such BRIC countries as Russia or Central and Eastern European countries more generally (Ralston, 2008, p. 39).[2]

Conclusion from these three vital challenges is that the state of the literature on cross-national differences in managerial values and converging business cultures is worrisome. Extant empirical work is methodologically flawed and, at any rate, highly incomplete. In short, there is an urgent need to put the convergence debate and our understanding of cultural (dis)similarities in managerial values on more solid theoretical and evidentiary footing.

This paper subsequently sets out to address the above challenges. Doing so requires us to develop a novel empirical approach with three outstanding features. First, we take birth cohorts as the main unit of analysis, this way providing the analysis with a thorough grounding in theories of value change (Inglehart & Welzel, 2005; Mannheim, 1928/1929; Ryder, 1965). Second, we consider unique longitudinal data with managerial values measured at four different points in time.[3] Third, we ensure international generalizability by examining the dynamics of business culture for a large sample of countries that comprises the majority of the world's main cultural clusters. The paper thus integrates the focus on generations of the most insightful existing analyses of cultural convergence with the power of longitudinal data (Ralston, 2008, p. 37). At its core, however, the paper is best seen as following up on Twenge et al.'s (2010) study of generational differences in work values in the US. We analyze a sample of 37,254 managers as the group of people of most interest to management scholars and extend Twenge et al.'s (2010) work to consider generational values differences across 29 countries.

Overall, our study contains much that is novel and original. Methodologically, we redesign the study of cultural convergence to take theories of value change as the starting point and provide what we think is a very valuable blueprint for future research on the dynamics of managerial values and business cultures worldwide. Substantively, the paper makes an important advancement in our understanding of cultural (dis)similarities in managerial values and the dynamics therein. Our analysis brings forth the first truly global evidence on generational differences in the values of managers, a quantification of the speed at which countries' business cultures are changing, and an assessment of the extent to which international values systems are converging or diverging. Results show convergence of managerial values, although, interestingly, this phenomenon is not universal for all values domains. We find these results have some important implications, for firms and practitioners as well as for scholarly work in various managerial disciplines. Given the dearth of evidence on cultural convergence and the dynamics of managerial values, our analysis is bound to raise some issues itself. Hence, we also lay out some directions for future research.

VALUES

The importance of values for social science and people and societies in general has long been recognized (Hofstede, 2001; Meglino & Ravlin, 1998; Rohan, 2000; Schwartz & Bilsky, 1987). As such, values are widely researched, mostly in psychology, but also in management (see, for instance, England, 1967 and Kelly & Reeser, 1973 for early work). There are many different definitions of values (Rohan, 2000). The general agreement is that values are concepts about desirable end states or behavior and are not tied to specific situations (Schwartz & Bilsky, 1987, p. 551). They are evaluative and direct individuals to select between alternative courses of action (Hofstede, 2001; Meglino & Ravlin, 1998; Schwartz & Bilsky, 1987). A straightforward definition is that values are "broad tendencies to prefer certain states of affairs over others" (Hofstede, 2001, p. 5).

An important feature of values is their stability (Inglehart & Welzel, 2005; Meglino & Ravlin, 1998; Rohan, 2000). The idea is that people acquire their value orientations early in life, during their pre-adult formative years. The key influences are personal experiences and, especially, socialization processes. The latter involve one's parents, siblings, family, peers, teachers, the media, etc. as agents instilling a particular values system in the individual (e.g., Hitlin & Piliavin, 2004; Hofstede, 2001; Inglehart & Welzel, 2005; Meglino & Ravlin, 1998).[4] For individuals from a given birth cohort, we may add to this the experience of a certain societal environment, such as critical life history events (e.g., a war) and socio-economic circumstances that they share with others in their cohort (e.g., the great depression). Geert Hofstede puts it as follows: “the sources of one’s mental programs lie within the social environments in which one grew up and collected one’s life experiences” (Hofstede, Hofstede, & Minkov, 2010, p. 5) and “national cultures are part of the mental software we acquired during the first ten years of our lives, in the family, in the living environment, and in school, and they contain most of our basic values” (Hofstede et al., 2010, p. 346). Once acquired in their pre-adult formative years, individuals’ values remain relatively stable over the life course.[5] This is not to deny, however, that values can exhibit so-called age / career stage (or life stage) effects (Erikson, 1968; Joshi et al., 2011; Kanfer & Ackerman, 2004; Super, 1957; Twenge et al., 2010). The basic idea behind these values influences is that people’s values continue to evolve also during adulthood because the specific (career) decisions that individuals make further define their adult identities. A striking illustration is the finding of Dahl, Dezső, and Ross (2012) that male CEOs increase the wages they pay to themselves after fathering a child (especially a son), while lowering the wages of their employees (especially of male employees).

From a diverse literature, psychologists and other social scientists have slowly developed a general framework of values that captures the complete spectrum of human motivations. The development of this framework is mostly the work of Shalom Schwartz (Schwartz & Bilsky, 1987, 1990; Schwartz, 1992). The standard framework revolves around ten basic value constructs. These basic values are placed in a circle (often referred to as a circumplex), where adjacent values are seen as being compatible, while values that are not compatible are placed opposite each other (Figure 1). The description of the ten basic values is as follows (taken from Schwartz et al., 2001, p. 521): Power refers to social status and prestige, control or dominance over people and resources; Achievement refers to personal success through demonstrating competence according to social standards; Hedonism refers to pleasure and sensuous gratification for oneself; Stimulation refers to excitement, novelty, and challenge in life; Self-Direction refers to independent thought and action-choosing, creating, exploring; Universalism refers to understanding, appreciation, tolerance and protection for the welfare of all people and for nature; Benevolence refers to preservation and enhancement of the welfare of people with whom one is in frequent personal contact; Tradition refers to respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide the self; Conformity refers to restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms; and, finally, Security refers to safety, harmony and stability of society, of relationships, and of self.

<< Insert Figure 1 about here >>

The ten basic values combine to form four higher-order subdimensions, namely Self-Enhancement (Power and Achievement), Self-Transcendence (Benevolence and Universalism), Openness-to-Change (Self-Direction, Stimulation and Hedonism) and Conservation (Tradition, Conformity and Security) (Figure 1). The position of these higher-order subdimensions in the circle again reflects their mutual (in)compatibility. The opposing subdimensions form the two overarching values dimensions: Self-Enhancement vs. Self-Transcendence (SEST) and Openness-to-Change vs. Conservation (OTC) (Figure 1). The present paper uses the standard values framework by Schwartz, testing for convergence/divergence of the orthogonal main values dimensions, SEST and OTC.

GENERATIONS AND CONVERGING BUSINESS CULTURES

Value Change and Cultural Convergence

Given the importance of values for firms (Meglino & Ravlin, 1998), the dynamics of values are of crucial interest, both to practitioners and researchers in the field of management. Are there generational differences in values and are values converging to become more similar across countries or not? The interest in generational differences is more recent, while the idea of values convergence has a long history in management research. Focusing on convergence, many authors have summarized the arguments in this literature to reflect three positions: convergence, divergence and, more recently, crossvergence (Ralston et al., 2008).[6] The convergence or divergence perspectives are easy to comprehend in terms of their respective predictions concerning the dynamics of managerial values and, particularly, of cultural differences therein. For now, we disregard the mechanism behind changing managerial values. The convergence perspective can then simply be understood as managers' values becoming more similar over time with existing differences somehow giving way to a more universal managerial values system. Studies favoring this idea are many, including such seminal works as Harbison and Myers (1959) and Inkeles (1960).

The divergence perspective, in contrast, finds that cross-national variation is substantial and that differences in business culture and managerial values between countries persist. Hofstede is a most famous proponent of the divergence view. He finds, for instance, that "national value systems should be considered given facts, as hard as a country's geographical position or its weather" (Hofstede et al., 2010, p. 20) and that "for the next few hundred years at least, and probably for millennia afterward, countries will remain culturally diverse" (Hofstede et al., 2010, p. 473) (see, also, for instance, Hofstede, 2001, p. 34, p. 36).

Crossvergence can be seen as a combination of the convergence and divergence views, although the actual concept is more subtle. It is defined as follows: "crossvergence occurs when an individual incorporates both national culture influences and economic ideology influences synergistically to form a unique value system that is different from the value set supported by either national culture or economic ideology" (Ralston et al., 2008, p. 12). The end result of crossvergence is best described as a melting pot.

Ultimately, the question whether managerial values are converging, diverging or, perhaps, crossverging, is, of course, an empirical question. However, as mentioned in the introduction, precisely on this count there is growing critique that the extant literature is incomplete, lacking credible international generalizations, and, worse, has gathered its evidence using inappropriate research designs.

The Theoretical Mechanism Behind Cultural Convergence: Generational Values Shifts and Cohort Replacement

Convergence or the development of a unified, global business culture requires value change at the societal level. Though not often recognized in the management literature, this gives the convergence debate strong roots in the long-standing literature on cultural change, involving such scholars as Émile Durkheim and Karl Marx, and Marquis de Condorcet before them. Sociologists (as well as, for instance, developmental psychologists) have long recognized the mechanism that can bring about societal-level value change even when values themselves are relatively stable and do not change much after adolescence (Hitlin & Piliavin, 2004; Inglehart & Welzel, 2005). The mechanism revolves around birth cohorts that have the potential to bring about social change because of the coming of age of a new, younger generation and the retirement of an older generation (Geertz, 1963; Mannheim, 1928/1929; Parsons, 1967; Ryder, 1965). At the societal level, values can change because the values of the younger birth cohort that joins society differ from the values of the older birth cohort that retires. Birth and death are essential features of this mechanism known as cohort replacement.

Realizing the potential for societal level values change offered by cohort replacement only requires that the values of the older and the younger birth cohorts are different (cf. Twenge et al., 2010). These differences, in turn, would be due to different socialization experiences, particularly with regards to the societal circumstances that reigned during the pre-adult formative years of a given birth cohort.

For actual convergence, mere heterogeneity in socialization experiences or even generational values shifts are not sufficient, however. Convergence means that the values of one country "catch up" with the values of another country (where we obviously do not use the term catch up to signify any normative stance on which values are more desirable). Cultural convergence requires both that generational values differences are of a systematic nature, showing a clear trend, and that there is country variation in the pace of these systematic generational value shifts. If these two requirements are met, societal values will change more rapidly in one society than in another, slowly eliminating initial cultural differences in values. For reasons of space, in our theorizing on and empirical analysis of convergence of managerial values and countries' business cultures below, we disregard the generational differences in values that underlie cultural convergence. Instead, we jump straight to formulating and testing hypotheses concerning the actual convergence or divergence of managerial values.

Development of Convergence Hypotheses

The extant convergence literature gives us two general hypotheses for the kind of generational dynamics in managerial values that we should expect. Either cultural differences in managerial values are waning across generation cohorts (convergence) or they are remaining, perhaps even increasing (divergence). The crossvergence perspective (Ralston, 2008) adds a layer to this basic dichotomy. Next to national culture, there may be other country-level factors influencing managers' values.[7] Hence, we may expect convergence dynamics to vary across values. Depending on how prone the factors influencing values in a particular domain are to exhibiting systematic generational shifts, convergence is more likely to occur in some values domains than in others.

For our study, we focus on the two main values domains, SEST and OTC. Starting with the latter domain, we find much reason to expect systematic generational shifts and a systematic waning of cultural dissimilarities in the OTC domain. Classic convergence or modernization theory (e.g., Inkeles, 1960; Kerr, Dunlop, Harbison, & Myers, 1960; Webber, 1969) identifies the process of economic development as a most powerful force shaping the values systems of societies and the cultural outlook of generation cohorts.[8] Drawing on Maslow's (1954) famous hierarchy of needs and a generalized "scarcity effect" (see, for instance, Inglehart & Welzel, 2005), the argument is that increased affluence moves values in the direction of attaching lesser importance to materialist objectives and greater importance to objectives that transcend immediate survival needs. Growing up in poverty instills birth cohorts with an appreciation of all material things they lacked in their formative years. On the waves of growing affluence, attention moves away from immediate survival needs and such materialist values, however, and needs higher up in Maslow's hierarchy gain prominence, including the need for individual freedom, self-expression, self-realization, et cetera. The associated values are called postmaterialist values, which, in opposition to materialist values, concern appreciation of non-material things such as the above-mentioned freedom and self-expression objectives. Applied to OTC values, we find the forces of modernization to work towards a weakening of Conservation values, particularly Security values, and a strengthening of such values as Hedonism and Stimulation (Openness-to-Change values) (see Figure 1). In terms of generations and generational values differences, this boils down to a steady waning of Conservation values across birth cohorts and a comparative increase in the importance of Openness-to-Change values. What is more, we also expect these generational shifts to be larger in certain countries, particularly in developing countries that find themselves on a steeper modernization path than countries that are already developed (and globally well-integrated and close to the technological frontier). Hence, countries are "catching up" and we have the following hypothesis concerning convergence of OTC values:

Hypothesis 1: *Managerial values in the domain of Openness-to-Change vs. Conservation are converging.*

Expectations concerning changes and convergence of SEST values are more ambiguous. At first, it seems that we can straightforwardly extend the idea of increased pre-adult affluence leading to an emphasis on postmaterialist objectives to predict a shift towards Universalism and Benevolence (Self-Transcendence) values and away from Power and Achievement (Self-Enhancement) values. Certainly, we would associate Power and Achievement more with materialist concerns than with postmaterialist concerns. Most studies considering generational differences in SEST values thus predict a shift towards Self-Transcendence (e.g., Danis, Liu, & Vacek, 2011; Ralston & Egri, 2004). Several scholars, especially in economics, argue, however, that increasing affluence may intensify social comparison, meaning that it raises concern with one's position on the social ladder and feeds the desire to distinguish oneself from others (Hirsch, 1976; Jevons, 1871, p. 40; Stigler & Becker, 1977, p. 89). If wealth indeed brings about such an escalated desire to outperform others, increased affluence likely cultivates Power and Achievement values at the expense of Universalism and Benevolence values. We thus may have countervailing forces when it comes to the value attached to Self-Enhancement and Self-Transcendence. Beforehand it is not clear which force exerts the strongest influence on the SEST values of any given birth cohort.

We conclude that there may well be generational differences in SEST values. Given the theoretical ambiguity, we find it far from obvious, however, that countries will exhibit the kind of differently paced generational shifts in SEST values that would lead countries to "catch up" with one another. As such, we shy away from formulating a hypothesis concerning convergence or divergence in this values domain. We note, however, that, whatever the exact nature of the (generational) dynamics in SEST values, convergence in SEST values will be slower than convergence in OTC values. Hence, our second hypothesis is as follows:

Hypothesis 2: *Managerial values in the domain of Self-Enhancement vs. Self-Transcendence are slower to converge than are managerial values in the domain of Openness-to-Change vs. Conservation.*

Taken together, Hypotheses 1 and 2 and the discussion on which these hypotheses build, constitute an extension of the crossvergence perspective. As mentioned, cultural convergence need not be a yes-no phenomenon and we may find that countries' business cultures are growing more similar in some values domains, but that in other values domains cultural dissimilarities show no signs of waning.

MATERIALS AND METHOD

Empirical Approach

Following theories of value change that highlight cohort replacement and generational value shifts as the mechanism behind cultural convergence, we develop a novel empirical approach that revolves around birth cohorts. The main challenge in designing our research is how to expand the number of countries that we can analyze simultaneously so as to solve the problem of international generalizability and present evidence on countries and cultures not hitherto considered. Small-scale studies of the type that currently dominate the literature on cultural convergence are methodologically straightforward. Typically, the research design involves just comparing mean values scores for two countries, looking at the statistical significance of the differences, and then concluding whether values are converging or not. Such a comparison is neither feasible for a large-scale study such as the present one, nor do we want to let our analysis boil down to a simple yes-or-no answer that hides so much of why we are interested in learning about the dynamics of managerial values in the first place.

Our solution to this challenge is to apply the concept of sigma convergence. Sigma convergence refers to decreasing dispersion or variance in the level of a particular variable across countries.[9] Economists use sigma convergence to examine time trends in cross-country income differences (Quah, 1993; Sala-i-Martin, 1996). They calculate the standard deviation across the countries in their sample for several years in a row and run a time-series regression to see whether dispersion across countries is decreasing over time. Our adaptation is that, following theories of value change, we look at consecutive birth cohorts (i.e. birth years) rather than a regular time trend and at the dispersion of mean values scores for these birth years across countries. The analysis thus includes mean value scores for all the countries in our sample, separately for each available birth year / birth cohort in the sample. These birth-year specific country mean values scores are the original data points and we calculate the variance in country mean values scores for all the birth years covered by the sample.

For the actual test of Hypotheses 1 and 2, we again use regression analysis. We estimate a simple linear trend in the dispersion measure (the dependent variable) using year of birth as the independent variable. The empirical evidence on our hypotheses comes in the form of the answer to the question whether dispersion decreases with each separate birth year or not? If dispersion decreases, it means that for each younger birth cohort country differences in managers' values become less pronounced, even to the extent that they may be non-existent in some future generation cohort. If, however, country differences in values remain pronounced also in younger birth cohorts, countries are not growing more similar and nationality remains a powerful predictor of values for younger as well as for older generations.

The number of birth years available determines the number of observations for this regression analysis. The number of birth years multiplied by the number of countries gives the total number of original data points, the birth-year specific country mean values scores. As an immediate extension, we repeat the regression analysis not for countries but for cultural clusters. Results of this analysis are meant to put our initial findings on the extent to which managerial values are converging or diverging in a comparative perspective. Further tests act as robustness checks. First, we test for sigma convergence using mean scores not for dispersion in country mean scores but for country median scores. Second, and more importantly, we test for sigma convergence in country mean values scores, with possibly confounding age / career stage effects controlled for.

Sample and Measures

Our data come from the well-known European Social Survey or ESS (Jowell & Central Co-ordinating Team, 2007). We use data from the first four waves of the ESS, conducted in 2002, 2004, 2006 and 2008. This means that we do not just have longitudinal data on managerial values measured at two different points in time but that we have a panel of repeated cross-sections. As such, the data allow for an almost ideal research design to study generational (values) shifts (Evan, 1959; Ryder, 1965).

As mentioned, the actual measures derive from the framework of universal human values by Shalom Schwartz. They are collected through his Portrait Values Questionnaire or PVQ (Schwartz et al., 2001). The PVQ is highly similar to the Schwartz Values Survey or SVS, which is used most often by management scholars researching values (e.g., Brett & Okumura, 1998; Shin & Zhou, 2003). The difference is that the design of the PVQ has been improved to make the questionnaire items more understandable for respondents (see Schwartz et al., 2001, pp. 521-524 for more details). The version of the PVQ included in the ESS consists of 21 questionnaire items, each related to one of Schwartz's ten basic value constructs. We followed the data recoding protocol specified by Schwartz to construct individual ratings on the two overarching value dimensions, OTC and SEST. Scores are on a scale from -5 to +5, with higher scores meaning more emphasis on Openness-to-Change and Self-Transcendence compared to Conservation and Self-Enhancement.[10] The website of European Social Survey Education Net, http://essedunet.nsd.uib.no/cms/topics/1, gives more information on how to go about constructing OTC and SEST scores from the raw data. The validity of Schwartz's values framework and the ESS values data has been widely established, also in cross-cultural comparative research (e.g., Bilsky, Janik, & Schwartz, 2011; Davidov, Schmidt, & Schwartz, 2008).

Combining the four waves of the ESS, the complete data set covers representative samples for a total of 29 European countries. Despite all being European, these countries are highly culturally diverse, belonging to seven out of the 12 main cultural clusters identified by Hofstede (2001) and further including such countries as Russia and the Ukraine.[11] We have to drop several birth years from the analysis, as they do not fulfill the data requirements for analysis of sigma convergence. In total, we are left with 37,254 observations spread out over 49 birth years (starting in 1932 and ending in 1983, with birth years 1935, 1937 and 1952 dropped). Both the number of countries and the number of individuals in our analysis compare very favorably to existing studies of managerial values that consider non-longitudinal data on maximum 1,000 or 2,000 managers from typically two, maybe three countries (cf. Table A.1 in the appendix).

We supplement the values data with data on individuals' year of birth, age, and, of course, their country of residence, which are also available in the ESS data set. The complete sample comprises 1,421 country-specific birth years (49 x 29). These 1,421 birth-year specific country mean values scores are the original data points in our analysis, while the actual analysis of sigma convergence of managerial values comprises 49 separate observations (i.e. dispersion scores), one for each birth year in the sample.

<< Insert Table 1 about here >>

Table 1 presents descriptive statistics, showing, among others, high variance in values across both birth years and countries. Such variation is expected, and is consistent with, for instance, the evidence on generational values differences in Twenge et al. (2010). Descriptive statistics for median (as opposed to mean) scores, cultural cluster scores, and the age variable are available on request. More information on the ESS can be found on the survey's website, http://www.europeansocialsurvey.org.

RESULTS

Sigma Convergence of Managerial Values

Our basic analysis concerns dispersion in country mean scores for managerial values. Figure 2 depicts this dispersion for the 49 birth years in our sample. Eyeballing Figure 2, we find a convergence trend in the OTC values domain and no trend—neither convergence nor divergence—in SEST values. A formal test confirms this observation. Estimating the standard deviation in country means for OTC as a linear function of birth year shows a statistically highly significant decline of -0.0029 points with every birth year (standard error [SE] = 0.0005; p = 0.000; R^2 = 0.39; n = 49). For SEST, in contrast, the trend is 0.0001, which is far from statistically significant (SE = 0.0007; p = 0.87; R^2 = 0.00; n = 49). From the fact that dispersion levels are decreasing across birth years we conclude that there is sigma convergence of managerial values, at least in the OTC dimension. Results therefore clearly confirm Hypothesis 1. SEST values do not show evidence of convergence. We do find clear differences in the pace of convergence between OTC and SEST values, however, supporting Hypothesis 2.

<< Insert Figure 2 about here >>

The pace at which convergence of OTC values takes place implies that it will take about 190 years before the dispersion in mean country value scores of the earliest birth years (individuals born in the 1930s with a dispersion level of about 0.55) is brought down to zero.[12] This pace contrasts with Hofstede's supposition that countries will remain culturally diverse for the next few millennia (Hofstede et al., 2010, p. 473) (although we have, of course, worked under the assumption that the linear trend will continue unabated). Meanwhile, the combination of convergence of OTC values and a lack of convergence of SEST values is consistent with the crossvergence perspective and the idea that convergence is not a yes-no phenomenon (Ralston, 2008).

As a way to foster interpretation of the findings, we next consider dispersion not for countries but for cultural clusters. Figure 3 depicts the dispersion across birth years for the eight cultural clusters that we were able to identify in our sample (see Note 11). We consider the exact same birth years as in Figure 2.

<< Insert Figure 3 about here >>

For cultural clusters we find not one but two convergence trends, not just for OTC values but, this time, for SEST values as well (Figure 3). The estimates show a trend of -0.0021 (SE = 0.0005; p = 0.000; R^2 = 0.30; n = 49) for OTC values and a trend of -0.0022 (SE = 0.0006; p = 0.000; R^2 = 0.25; n = 49) for SEST values. The statistically significant trend for SEST values is at odds with the results obtained using countries instead of cultural clusters. We did not find very strong a priori reasons to expect systematic shifts in managers' SEST values, however, and the discrepancy between the results for countries and the results for cultural clusters may reflect the diffuse nature of values change in the SEST domain. We can also make a projection as to how long it would take before the dispersion in value scores for cultural clusters is brought down to zero. Taking a mean dispersion for the 1930s birth cohort of about 0.36, the estimated trend would need to continue for roughly 160 to 170 years (starting with the 1930s birth cohort) before the differences would disappear. Also considering the size of the estimated coefficients (-0.0021 vs. -0.0029), convergence occurs at roughly the same pace across cultural clusters as it does across countries.

Robustness Checks

In terms of robustness, we obtain results similar to the main results when we look at dispersion in country median scores rather than in country mean scores (Figure 4). The estimated trend in the dispersion in median OTC scores is -0.0025 (SE = 0.0007; p = 0.000; R^2 = 0.23; n = 49) and the comparable estimate for SEST is 0.0002 (SE = 0.0007; p = 0.81; R^2 = 0.00; n = 49).

<< Insert Figure 4 about here >>

The most important challenge to the findings so far concerns the potentially confounding influence of age / career stage effects. To check, we repeat the analysis of sigma convergence across birth years, but for birth year specific country means after age / career stage effects have been controlled for. We start by estimating a simple regression model with managers' values as the dependent and age / career stage effects as the independent variables. The exact model specification is to explain differences in managers' OTC and SEST values using a linear, a quadratic and even a cubic age term. The residuals for this regression provide the raw data for the analysis of sigma convergence.

<< Insert Figure 5 about here >>

Results remain largely unaffected (Figure 5). The estimated trend in birth year specific country means of residual values scores is -0.0028 (SE = 0.0005; $p = 0.000$; $R^2 = 0.36$; $n = 49$) for OTC, and 0.0002 (SE = 0.0007; $p = 0.73$; $R^2 = 0.00$; $n = 49$) for SEST. As these results are highly similar to the results of the main analysis, it is clear that age / career stage effects are not somehow responsible for our findings. More generally, these results are consistent with the idea that age / career stage effects are not expected to have much confounding influence in a sample comprising data measured at four different points in time (cf. Evan, 1959; Twenge et al., 2010).

Overall, we find that the evidence supports widespread convergence of managerial values. Cultural convergence is not limited to narrow country dyads such as the US and China or the US and Japan, but a much broader phenomenon that takes place also among a highly varied and internationally generalizable group of countries.

DISCUSSION AND CONCLUSION

Understanding the dynamics of cross-national differences in values and business culture is crucial for successful global expansion and dealing effectively with the cultural diversity present within the multinational firm. As such, management has a long history of comparative research on cultural values and managerial values systems that goes back more than 50 years. Nevertheless, it is becoming increasingly clear how little we truly know about dynamics of managerial values and change in countries' business cultures. Particularly, there is growing concern that the evidence that has been amassed on the convergence/divergence of the values of managers (so-called managerial values) is incomplete and/or based on flawed research designs. In addition, most studies tend to be atheoretical, not actually studying the mechanism behind values change and cultural convergence, specifically generational shifts and so-called cohort replacement. In short, much is known about differences in managerial values between societies but, surprisingly, the (generational) dynamics of these cultural (dis)similarities remain largely uncharted territory.

This paper provides the most sophisticated and comprehensive analysis of converging business cultures and changing managerial values to date. Following theories of value change, we designed our analysis to revolve around birth cohorts. This way, our paper is well grounded theoretically, while empirically it heeds calls for a much-needed longitudinal approach to studying cross-national values differences and their dynamics. We applied this novel research design to unique values data on 37,254 different managers, collected at four different points in time. The complete data set covers 29 countries, representing the majority of the world's main cultural clusters. To solve the major problem of assessing convergence for a sample that covers a large set of countries, we have turned to the concept of sigma convergence, in turn borrowed from economics. Sigma convergence refers to a decrease in the variance in a certain variable and we have adapted it to consider levels of dispersion in birth-year specific mean value scores across countries.

For conceptualizing and operationalizing values, we have relied on the framework of universal human values by Shalom Schwartz, as this is the framework that is most used by social and cross-cultural psychologists. This framework comprises two overarching value dimensions: Openness-to-Change vs. Conservation (OTC) and Self-Enhancement vs. Self-Transcendence (SEST). OTC refers to self-direction and stimulation values as opposed to security, conformity and tradition values. SEST refers to power and achievement values as opposed to universalism and benevolence values. We hypothesized that managerial values in the OTC domain would be liable to convergence, while, a priori, the dynamics in SEST values seemed very diffuse and therefore largely unpredictable. Results confirmed our hypothesis of convergence of managerial OTC values, also bringing forward some interesting evidence on generational shifts in SEST values. Extensions to the basic analysis show that convergence of managerial values is not limited to the cross-country sample but occurs across cultural clusters just as well and at roughly the same pace. These results are robust to controlling for age / career stage effects that may confound genuine birth cohort effects.

Implications

Convergence of managerial values has the simple yet far-reaching implication that business cultures are becoming more similar across countries. Our findings thus signify that country is becoming less important as a way to identify values differences or as a unit of analysis in management research. Implications—both for firms and for scholarly work—operate at two levels. First, and most straightforward, generational values differences have implications for corporate strategies and policies as well as for management studies. Management has only just begun to consider generations and generational differences in its analyses. Our findings support the importance of generation cohorts and, more generally, generational differences for a variety of managerial issues, ranging from classic market segmentation to HRM practices such as employee selection and retention. The second implication is that we need to move beyond thinking in simple country dichotomies when seeking to understand diversity in business culture and managerial values. Ironically, one result of studying cultural convergence can be that results found show the future futility of research on cross-national differences in business culture and managerial values. Although full-fledged convergence is likely still some time away, already there is a clear need for practitioners and researchers to start working on a more sophisticated approach to recognizing differences in values. Values vitally shape the environment for doing business but there is much more to understanding values and business culture than is captured by nationality.

Limitations and Future Research

There are some limitations to our research. First, the analysis in this study has been limited to the two overarching dimensions in the standard values framework by Shalom Schwartz (e.g., Schwartz, 1992). A more detailed understanding of values naturally requires looking beyond these two main values domains to consider generational shifts and cultural convergence for values domains that are more fine-grained. Particularly, future research may look at Schwartz's four sub-dimensions, Openness-to-Change, Conservation, Self-Enhancement and Self-Transcendence, or even the basic value constructs that underlie these sub-dimensions, for instance Power or Achievement values.

Second, due to the scale of our analysis, we have studied values differences across birth cohorts, specifically birth years, instead of across clearly defined generation cohorts. Shared pre-adult socialization experiences are at the basis of systematic generational values shifts. As such, it would have been ideal had we been able to group individuals into cohorts, with the different cohorts clearly delineated on the basis of societal circumstances during childhood. This, however, is not feasible when one seeks to analyze a sample of countries as large and diverse as the sample that we considered. Rather, one simply has to make due. We do, however, consider it an interesting next step to actually test the effect of varying pre-adult situational factors on the values of managers from various country-specific birth cohorts.

Related to this last issue, we find that future research may usefully extend the present analysis by letting go of national boundaries. Groups such as birth cohorts that share similar pre-adult experiences and life history events need not be confined to any single country. Indeed, formative experiences shaping one's values can and do occur at different levels, either transcending country borders or being more localized, applying to groups living in a certain sub-national region. Our analysis of cultural clusters can be seen as an important first attempt to transcend country as a unit of analysis. Understanding of values and the dynamics therein may gain a great deal from further consideration of group differences in attitudes with group membership defined on the basis of a range of individual characteristics other than nationality.

Finally, our analysis is no exception to the idea that value change can be studied more accurately the longer the time-series of the values data available for empirical analysis. Our study has been exceptional in that it includes data collected at four different points in time, allowing for a research design that can distinguish between genuine generational effects as the mechanism behind value change and potential confounders. Nevertheless, we can improve on the present study by analyzing a time series that includes even more data points than the four data points for which we had data available.

The possibility of designing research in the way that we have done for this study, however, means that there is a great deal of potential for management research to make progress in understanding (international) values differences and their (generational) dynamics. The research design developed for the present study thereby provides a blueprint for future analyses of changing business cultures. This paper has helped build a new evidentiary foundation from which to debate convergence of managerial values and the idea of a unified, global business culture, and also may we now be more wary of how incomplete and limited our knowledge on values change and cultural convergence still is.

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FOOTNOTES

[1] Egri and Ralston (2004) is a notable exception, though this study suffers from the first problem of applying a cross-sectional research design (see, also, Note 3).

[2] A typical convergence study considers either one country in isolation or makes a dyadic, cross-sectional comparison between a Western culture (e.g., the US) and an Eastern culture (e.g., China or Japan). Some studies add Hong Kong or Taiwan as intermediate cultures (McGrath, MacMillan, Yang, & Tsai, 1992; Ralston, Pounder, Lo, Wong, Egri, & Stauffer, 2006; Vertinsky, Tse, Wehrung, & Lee, 1990). No study comes close to allowing for international generalization, which, as elaborated in Franke and Richey (2010), typically requires observations for at least 10 countries.

[3] Twenge et al. (2010) employ data collected at three points in time, but for the US only. Ralston et al. (2006) employ data collected at two points in time for a total of three countries, but do not consider generational differences. Egri and Ralston (2004) consider both generational differences and more than one country (China and the US), but in a cross-sectional research design (see Note 1). As explained by numerous researchers (Evan, 1959; Ryder, 1965; Twenge et al., 2010), only longitudinal data allows one to distinguish between genuine generational values shifts—the key drivers of convergence (or divergence)—and potential confounders. Table A.1 in the appendix

surveys the main research design features of some of the most prominent (cross-cultural) studies of the dynamics of (managerial) values.

[4] To be complete, socialization also occurs within organizations, as when new members learn about the organization's culture and values (e.g., Clugston, Howell, & Dorfman, 2000; Fang, Duffy, & Shaw, 2011).

[5] For evidence on the stability of values, see, for example, Alwin and Krosnick (1991), Gaudron and Vautier (2007) and Lubinski, Schmidt, and Benbow (1996). Low, Yoon, Roberts, and Rounds (2005) and Roberts and DelVecchio (2000) provide evidence from meta-analyses of longitudinal studies of continuity in individuals' values.

[6] See Joshi et al. (2011) for a summary of the literature on generations and generational values differences in management. To a large extent, the forces that give rise to generational differences in values are the same forces that underlie convergence or divergence trends at the global level (see, for instance, Twenge et al., 2010).

[7] We say country-level factors, because we are not interested in individual-level predictors of a manager's values, such as personality, except for age / career stage effects, which we consider in one of our robustness checks.

[8] Strictly speaking, convergence theory has been applied to study modernization. For our purpose, nothing material is lost by taking convergence and modernization as a single theory. A recent review of modernization / convergence theory can be found in Inglehart and Welzel (2005).

[9] The *sigma* of sigma convergence thus refers to the standard deviation of the sample for the variable of interest.

[10] Hence, while the dimension is called Self-Enhancement vs. Self-Transcendence, higher scores on this dimension actually signify more emphasis on Self-Transcendence values relative to Self-Enhancement values.

[11] The 29 countries belong to these seven cultural clusters in the following manner: (i) Austria and Israel; (ii) Belgium and France; (iii) Switzerland, Germany, and Italy; (iv) Denmark, Finland, Netherlands, Norway, and Sweden; (v) Spain, Greece, and Turkey; (vi) United Kingdom and Ireland; and (vii) Portugal. Hofstede's (2001) classification does not cover the following countries in the sample, an eighth cluster in our analysis: Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Luxembourg, Poland, Russia, Slovenia, Slovakia, and Ukraine.

[12] The calculation is as follows: $0.55 / 0.0029 \approx 190$ years, starting with the 1930s cohort. As the 1980s cohort has already reached adulthood and entered professional life, there are about 140 years left out of these 190 years.

TABLES

Table 1

Sample Statistics

	Openness-to-Change vs. Conservation (OTC) (-5,+5)	Self-Enhancement vs. Self-Transcendence (SEST) (-5,+5)
Mean of country-specific birth year means [n=1,421]	-.204 (.605)	1.09 (.481)
Sample mean [n=37,254]	-.084 (1.13)	1.19 (1.10)
Mean of birth year means [n=49]	-.204 (.408)	1.09 (.240)
Mean of country means [n=29]	-.204 (.370)	1.09 (.311)

Notes: Standard deviations in parentheses. Number of observations in square brackets.

FIGURES

Figure 1

The Framework of Universal Human Values

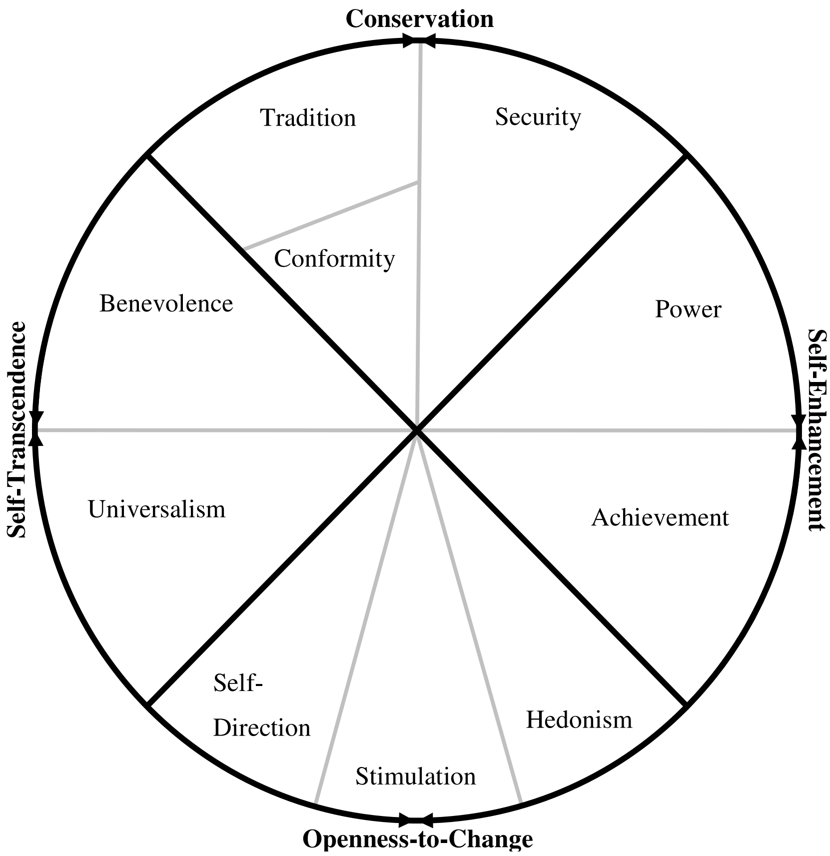


Figure 2

Sigma Convergence of Managerial Values over 49 Birth Years

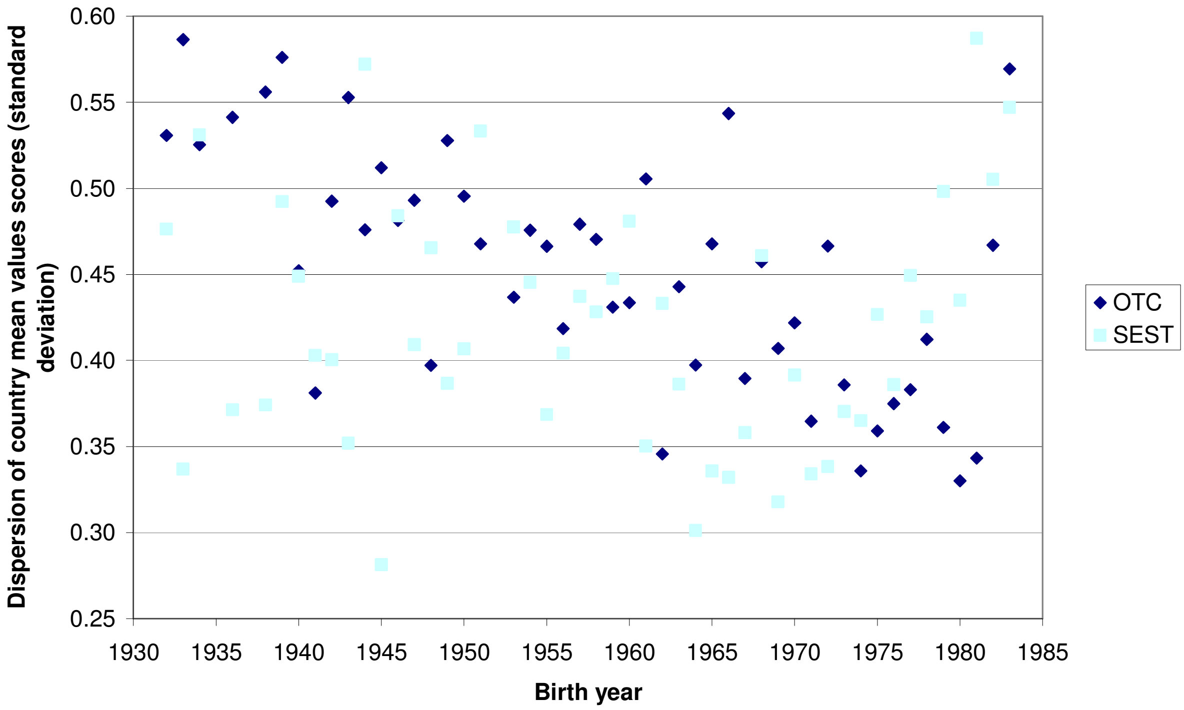


Figure 3

Sigma Convergence of Managerial Values Across Cultural Clusters

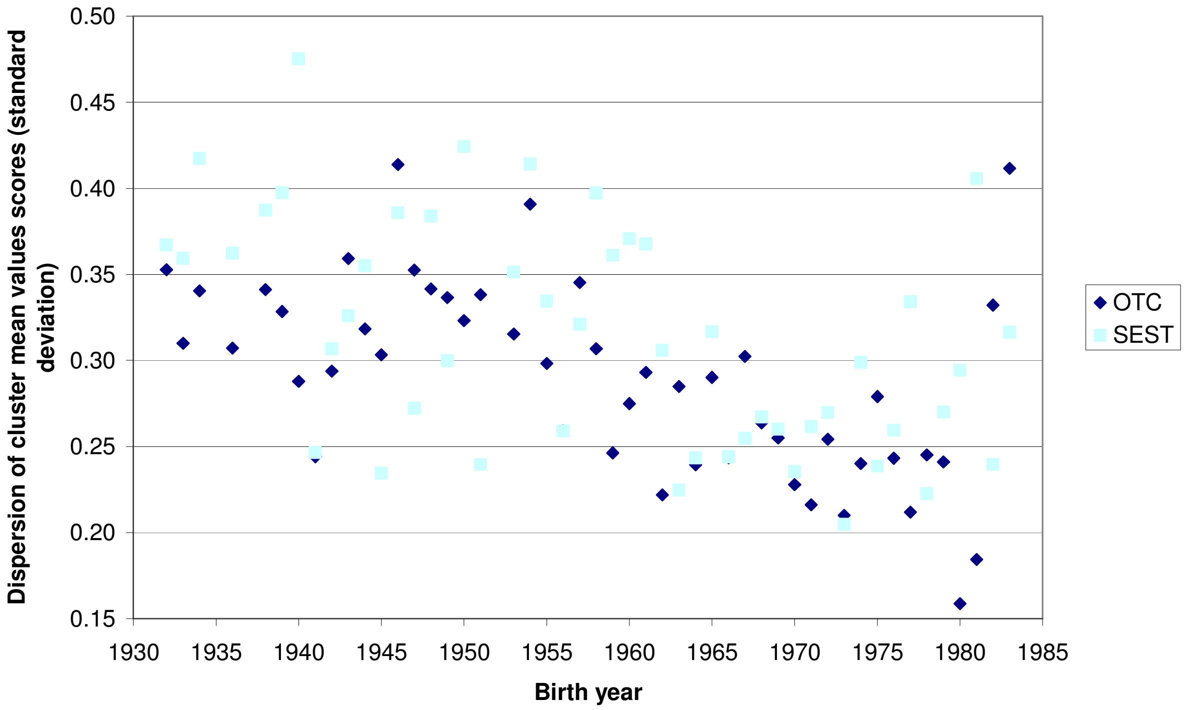


Figure 4

Sigma Convergence of Country Median Values Scores

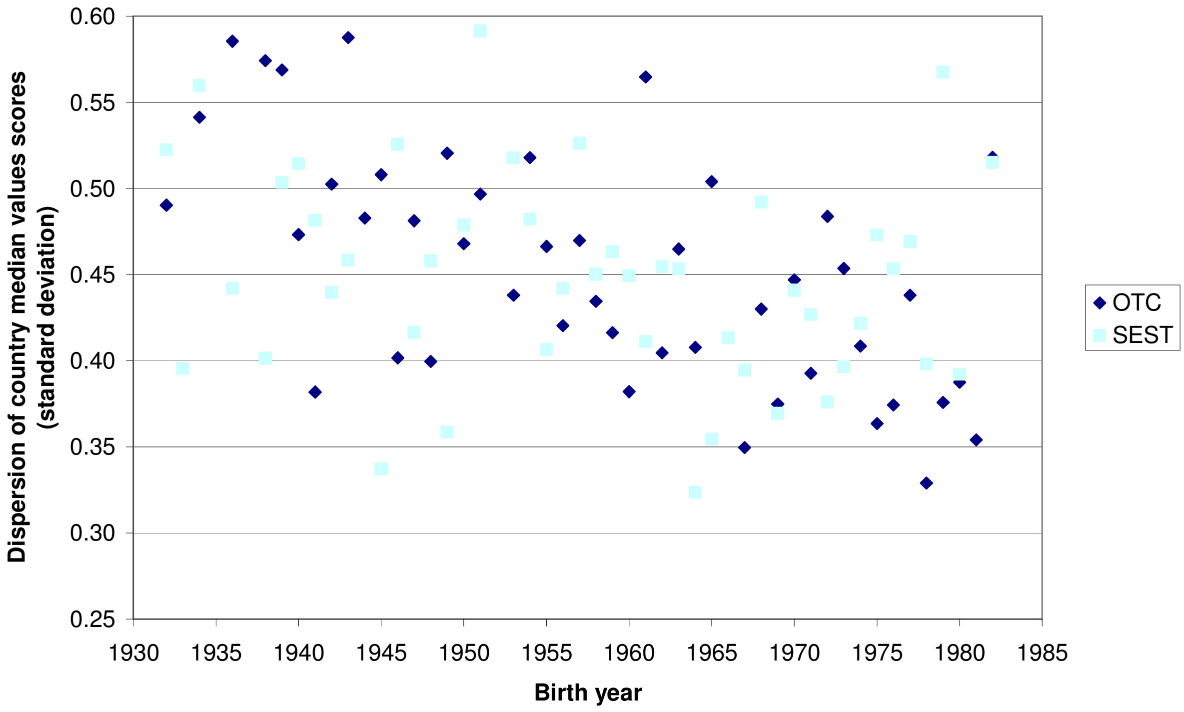
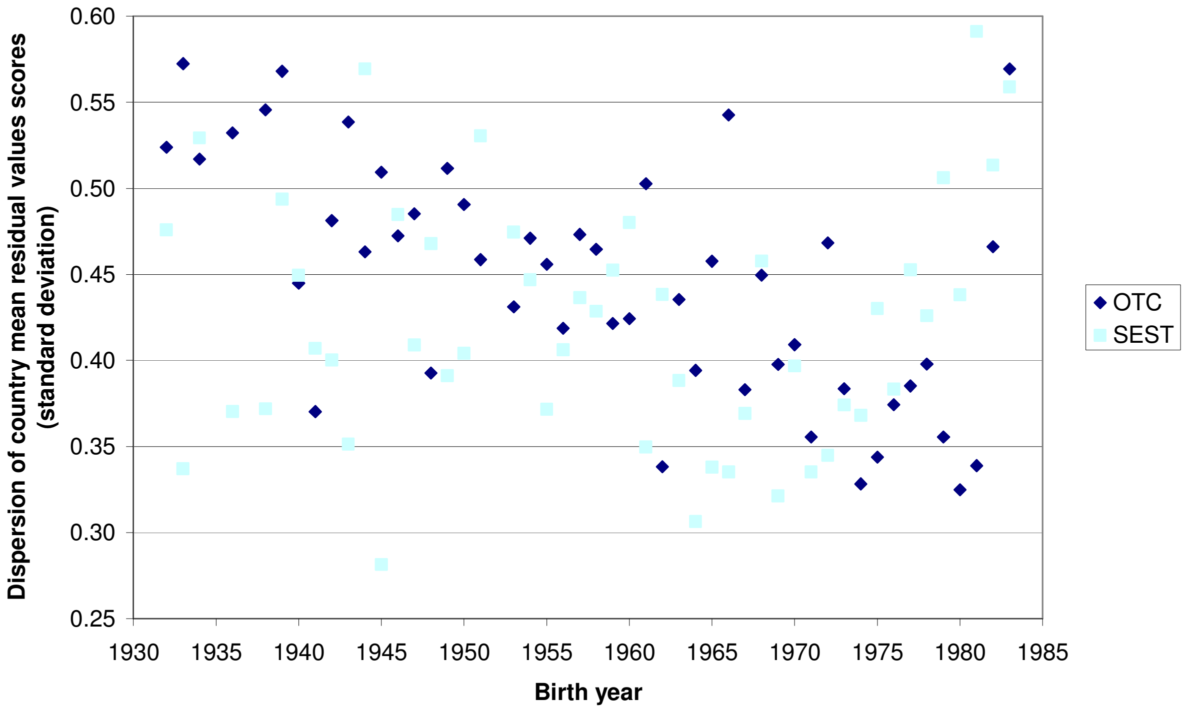


Figure 5

Sigma Convergence of Values After Controlling for Age / Career Stage Effects



APPENDIX

Table A.1

Research Designs in Studies of Convergence and the Dynamics of (Managerial) Values

Study	Countries studied	Data	Samples compared	Observations
Egri & Ralston (2004)	China & US	Cross-sectional	Generation cohorts across countries	1558
McGrath et al. (1992)	China, Taiwan, & US	Cross-sectional	Countries	675
Ralston et al. (2006)	China, Hong Kong, & US	Longitudinal, two sample points	Countries	776
Ralston et al. (2008)	China, Japan, Russia, & US	Cross-sectional	Countries	855
Twenge et al. (2010)	US	Longitudinal, three sample points	Generation cohorts, within country	16,507
Vertinsky et al. (1990)	Canada, China, & Hong Kong	Cross-sectional	Countries	155
Present study	29 countries, including Central and Eastern Europe countries, Russia, Turkey, etc.	Longitudinal, four sample points	Generation cohorts across countries	37,254

List of research reports

12001-HRM&OB: Veltrop, D.B., C.L.M. Hermes, T.J.B.M. Postma and J. de Haan, A Tale of Two Factions: Exploring the Relationship between Factional Faultlines and Conflict Management in Pension Fund Boards

12002-EEF: Angelini, V. and J.O. Mierau, Social and Economic Aspects of Childhood Health: Evidence from Western-Europe

12003-Other: Valkenhoef, G.H.M. van, T. Tervonen, E.O. de Brock and H. Hillege, Clinical trials information in drug development and regulation: existing systems and standards

12004-EEF: Toolsema, L.A. and M.A. Allers, Welfare financing: Grant allocation and efficiency

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